

Fig. 1: *Thottea paucifida*, A. Habit, B. Twig with capsule, C. Seed

The species was later identified as *Thottea paucifida* Ding Hou; earlier known to occur in Borneo. Ding Hou in his revision of Family Aristolochiaceae states that it has been collected just once from the banks of a stream flowing through stands of Rubber and other trees.

## REFERENCES

MATHEW, S.P. (1988): A supplementary report on the flora and vegetation of Bay Islands, India. *J. Econ. Tax. Bot.* 22(2): 249-272.

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39. *JUNCUS SPUMOSUS* NOLTIE (JUNCACEAE), A NEW RECORD FOR INDIA

During plant exploration in Dibang Valley, Arunachal Pradesh, we collected an interesting species of *Juncus*, which was kindly identified by Dr. F. Miyamoto of Tokyo University of Agriculture, Japan, to be *Juncus spumosus* Noltie. He also pointed out that the species constituted a new record for India.

A brief description and line drawing based on our own collections and relevant data are given to facilitate identification in the field.

**Material Examined:** Dibang Valley, Mayodia Pass, 2635 m, 20.viii.2000, M. Bhaumik & M.K. Pathak

This species is reported for the first time in India from the Andaman and Nicobar Islands. A brief description and illustration is provided for identification.

*Thottea paucifida* Ding Hou, *Blumea* 27: 324, 1981; *Flora Malesiana* 10: 73, 1984.

Undershrubs. Leaves alternate coriaceous, elliptic to slightly obovate, 4-10 x 2-4.5 cm, cuneate, obtuse to slightly cordate at base, margin entire, apex acute to obtuse, densely villous below, glabrous above. Basal nerves 3; lateral nerves 4-5 pairs, elevated below, reticulate, obscure above. Petiole c. 3.5 mm long, angular, twisted at apex, glabrous. Seeds ellipsoid, c. 3 x 1.5 mm, transversely rugose.

**Note:** Ding Hou in his revision states "Capsules Unknown". Capsules and seeds are described here for the first time.

**Specimen examined:** South Andaman, Rutland, 19.vii.1986. J.L. Ellis, 12305 (PBL).

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*Juncus spumosus* Noltie in *Edinburg J. Bot.* 51(2): 139, 1994.

Rhizomaceous herb, borne singly, sometimes with one or two offspring. Rhizome short, knobby. Stem 30-75 cm long, terete, arching over. Stem leaves 3-5, 7-18.5 cm long, 1.5-5 mm broad, channeled throughout or at least on upper part, 'V' shaped in cross section. Leaf sheaths gradually narrowed into blades. Ligules absent. Inflorescence terminal, 13-21 headed, 3-12 flowered with chestnut brown to deep glossy brown capitula.

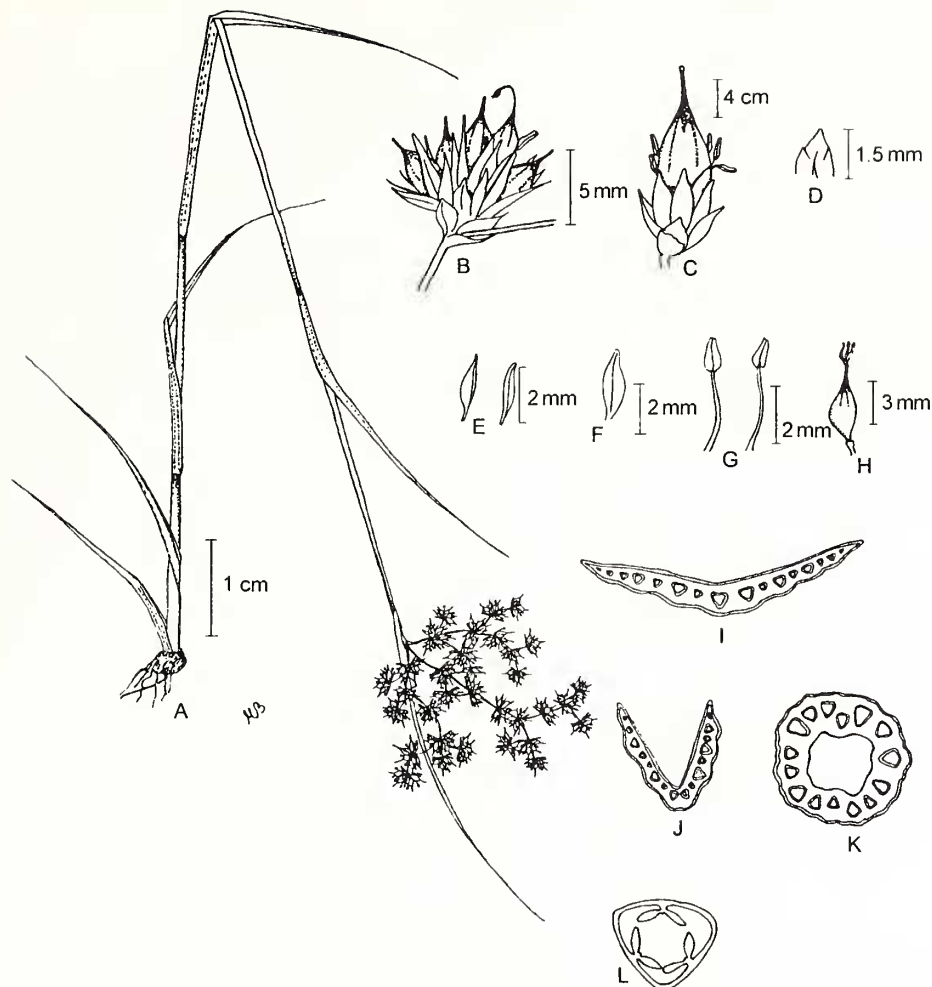


Fig. 1: *Juncus spumosus* Noltie, A. Habit, B. Part of inflorescence, C. Flower, D. Bract, E. Outer perianth, F. Inner perianth, G. Stamen, H. Capsule, I. Cross Section of leaf, basal part, J. Cross section of leaf, upper part, K. Cross section of stem, L. Cross section of capsule

Bract 1.5-2 x 1.5 mm, ovate, membranous. Flowers 8 x 3.5 mm, bracteate, shortly pedicellate, chaffy brown to deep brown. Outer tepals 3, 2.5 x 1 mm, boat shaped with prominent mid-vein, chaffy brown. Inner tepals 3, 3-3.5 x 1 mm, boat shaped with prominent mid-vein, acute, chaffy brown. Stamens 6, exerted, exceeding the tepals, straw coloured. Filament 3.5 mm long, filiform with broad bases. Anther lobe 1 x 0.5 mm, basifixed. Gynaecium 7 x 4.5 mm, ovate, deep glossy brown; style 2 mm, stigma triforked, mildly twisted with granular deposition. Seeds 2-tailed, 0.5-0.75 mm long.

**Distribution:** India-Arunachal Pradesh; Bhutan, China.

**Notes:** The plants were found bearing flowers and immature fruit at the time of collection. They were growing on moist, open, sandy hill slopes in association with *Chimonobambusa callosa* (Munro) Nakai, *Eriophorum comosum* (Wall.) Wall. ex Nees, *Gaultheria* spp., *Rubus calophyllus* C.B. Clarke and *R. lineatus* Reinw. The area experiences heavy rainfall and is snow bound during winter.

Though the species grows within the protected Dibang Dihang Biosphere Reserve, its habitat is threatened due to regular landslides and road reconstruction. Only a small population of about fifteen plants was found confined in the said locality.

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